REMARKS

Applicant respectfully requests reconsideration and allowance of all claims pending in the subject application. In the Office Action, the Examiner withdrew objections to the specification and claims, withdrew rejections under 35 U.S.C. §112 and §103, issued a new rejection of claims 1-18 for obviousness and maintained a rejection of claims 1-8 and 11-16 for obviousness-type double patenting. Consequently, claims 1-18 and non-elected claims 19-27 remain pending in the subject application.

The Examiner made final a requirement to restrict between the process claims 1-18 of Group I and the apparatus claims 19-27 of Group II. The Examiner did not find persuasive the basis for Applicant's traversal. The Examiner apparently misunderstood that Applicant's traversal is on the grounds that the invention detailed in Applicant's apparatus claim 19 encompasses the Examiner's proposed apparatus for accomplishing the claimed process. However, Applicant's point is that stripping in the absence of baffles would not fall within the scope of claim 19 or any of the claims in the subject application. Hence, the Examiner's statements are true that "claim 19 does not include an apparatus 'without baffles' as defined in the proposed alternate apparatus," and that "the proposed alternate apparatus differs from the apparatus defined in applicants' claim 19." Second Office Action at page 2. However, the Examiner's proposed alternate apparatus is not relevant because it is not related either to the process as claimed or the apparatus as claimed. Hence, the process of claims 19-27 cannot be practiced by an apparatus that does not include baffles, nor can the apparatus of claims 1-18 be used to practice a process that does not use baffles. Accordingly, the Examiner's proposed alternative apparatus "a cyclone separator followed by contacting a stripping steam in the absence of baffles" is not relevant to the inquiry of MPEP §806.05(e) because the Examiner's proposed apparatus does not fall within the scope of the process as claimed or the apparatus as claimed. Hence, to support the requirement for restriction, the Examiner must propose an adequate apparatus that is materially different from the apparatus recited in claims 19-27 but that can be used to practice the process of claims 1-18 or vice-versa. Until the Examiner proposes such an alternative apparatus or process, Applicant respectfully requests the Examiner to withdraw the restriction requirement pursuant to the last paragraph of §806.05(e).

The Examiner rejected claims 1-8 and 12-16 under 35 U.S.C. §103(a) as being obvious over U.S. Patent 6,010,618 (the "Lomas patent") in view of U.S. Patent 2,472,502 (the "Tyson patent"). The Examiner contends that one of ordinary skill in the art would have found it obvious to modify the Lomas apparatus to include multiple openings over the entire surface of the baffles because the Tyson patent illustrates that multiple openings in the baffles desirably improves the degree of stripping. Applicant respectfully traverses this rejection.

Not until the discovery of Applicant's invention did anyone of ordinary skill in the art realize that catalyst was not sufficiently fluidized over sloped baffles. Those of ordinary skill in the art believed that the baffles were sufficiently fluidized so that more openings in the baffles were not necessary. Leading up to the invention claimed, Applicant performed a

cold modeling study which showed that catalyst on significant areas of the sloped baffle were not fluidized. Not until that discovery was made could there be any motivation to spread fluidized openings over the entire surface of the sloped baffle. Hence, absent Applicant's experimentation that led to the discovery of the present invention, there could have never been motivation to combine the teachings of the Tyson patent with the teachings of the Lomas patent.

Applicant additionally discovered superior advantages in fluidizing the whole surface of the baffle that were fully unexpected. The Tyson patent discloses that the high end of the amount of particles flowing down through the stripping section comprising horizontal grates should generally be about 1000 lbs/min-ft^2 or higher which is equivalent to 60,000 lbs/hr-ft^2. Col. 9, lines 37-40 (Note the line numbers on the page of the patent are off.) We can confirm that this is the high end of the range because when stripping over horizontal grates at flux rates greater than 60,000 lbs/hr-ft^2, stripping gas pockets can develop underneath the catalyst which will prevent catalyst from flowing downwardly, thereby preventing any stripping from occurring. Moreover, higher catalyst flux rates with concomitant higher stripping gas rates over horizontal grates result in bypassing by which stripping gas bubbles and catalyst particles do not sufficiently contact each other, thereby diminishing diffusion of the hydrocarbon from the catalyst into the stripping gas bubble. Hence, at higher catalyst flux rates, stripping efficiency over horizontal grates decreases. Additionally, with sloped baffles with a few holes like in the Lomas patent, we determined as shown in the Table on page 34 of the application that as catalyst flux rates increase, the stripping efficiency of conventional baffles decreases. Therefore, with horizontal baffles having openings spread out over the whole surface, high fluxes cannot be obtained or would provide poorer stripping efficiency and with conventional sloped baffles with a few openings, stripping efficiency decreased with higher fluxes. However, we found that by spreading the openings over the whole surface of a sloped baffle, stripping efficiency increased as catalyst flux increased. This surprising discovery provided a two-fold advantage of increasing stripping efficiency while increasing the amount of catalyst that could be effectively stripped over a given period of time. This is a result that was not predicted either in the Tyson patent or in the Lomas patent.

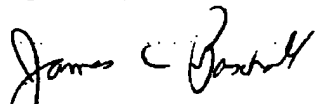
Applicant respectfully submits that because there was no motivation to spread out the openings along a sloped baffle before Applicant's research and because no one of ordinary skill in the art could have expected the superior stripping efficiencies at higher flux rates provided by Applicant's invention, claims 1-18 under consideration are not obvious over the cited references. Because process claims 19-27 also include the same limitation as to openings distributed over the entire sloped surface of the stripping baffle, claims 19-27 are also patentable over the cited references.

The Examiner also maintained her rejection of claim 1 under the judicially created doctrine of obviousness-type double patenting as being obvious over claim 2 of copending Application No. 09/877,981 and claims 1-8 and 11-16 over claims 1-7 and 17-20 of copending Application No. 09/990,244. Applicant pointed out in the last response that both of these copending applications were filed after the filing date of the subject application. Applicant respectfully submits that under no statutory or judicial authority, can these two

subsequently filed patent applications serve as prior art against the subject application. In response, the Examiner indicated that "[t]he double patenting rejections are still considered to be proper because dual ownership must be prevented and it is not known when each application will issue." Action at page 7. However, Applicant would like to respectfully point out that it does not matter when each of the applications will issue because the term of each patent that issues from the application will terminate 20 years from the filing date of each respective application. 35 U.S.C. §154(a)(2). Hence, the execution of a terminal disclaimer would only operate to limit the patent term for the subject application to within a date which would occur after the expiration of the patent for this subject application. Hence, because there is no basis in law for entering a double patenting rejection based on applications filed after the filing date of the subject application and because filing a terminal disclaimer would not restrict the term of the patent maturing from this application, Applicant respectfully requests reconsideration and withdrawal of the rejections for obviousness-type double patenting.

Applicant respectfully requests reconsideration and allowance of all of the claims 1-27 pending in the subject application. Should the Examiner have any questions regarding this matter, please feel free to call the undersigned.

Respectfully submitted,



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